

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A ceramic cooktop comprising:
 - a cooking plate made of a material selected from the group formed by a glass ceramic and a glass;
 - a ~~thermally sprayed~~ ceramic bonding layer having a thermally sprayed structure adhering to a selected surface of said cooking plate, said bonding layer having a thickness of 10 to 150 micrometers;
 - an electrically conducting intermediate layer located on said ceramic bonding layer and being connected to ground;
 - an insulating layer located on said intermediate layer; and
 - an electric heat conductor layer located on said insulating layer.

2. (original) The ceramic cooktop of claim 1, wherein said intermediate layer is made of a material selected from the group formed by TiO_2 , a mixture of Al_2O_3 having a portion of at least 50 wt.-% of TiO_2 , ZrO_2 , a mixture of Al_2O_3 with ZrO_2 having a portion of at least 50 wt.-% of ZrO_2 , and a mixture of Al_2O_3 with TiO_2 and ZrO_2 having a portion of at least 50 wt.-% of TiO_2 and ZrO_2 .

3. (original) The ceramic cooktop of claim 1, wherein said bonding layer is made of a material selected from the group formed by aluminum oxide, titanium oxide and mixtures thereof.

4. (original) The ceramic cooktop of claim 3, wherein said bonding layer is made of about 97 wt.-% of Al_2O_3 and about 3 wt.-% of TiO_2 .

5. (original) The ceramic cooktop of claim 1, wherein said insulating layer consists of a material selected from the group formed by cordierite, mullite, and mixtures thereof.

6. (original) The ceramic cooktop of claim 1, wherein said bonding layer has a thickness of about 30 to 100 μm .

7. (original) The ceramic cooktop of claim 1, wherein said bonding layer has a thickness of about 40 to 70 μm .

8. (currently amended) A ceramic cooktop comprising:
a cooking plate made of a material selected from the group formed by a glass ceramic and a glass;
a ~~thermally sprayed~~ ceramic bonding layer having a thermally sprayed structure adhering to a selected surface of said cooking plate;

an electrically conducting intermediate layer located on said ceramic bonding layer and being connected to ground;

an insulating layer located on said intermediate layer; and

an electric heat conductor layer located on said insulating layer.

9. (Currently amended) A ceramic cooktop comprising:

a cooking plate made of a material selected from the group formed by a glass ceramic and a glass;

a ~~thermally sprayed~~ ceramic bonding layer having a thermally sprayed structure adhering to a selected surface of said cooking plate;

an intermediate layer adhering to said bonding layer;

an insulating layer located on said intermediate layer; and

an electric heat conductor layer located on said insulating layer.

10. (original) The ceramic cooktop of claim 8, wherein said bonding layer has a thickness of about 10 to 150 μm .

11. (original) The ceramic cooktop of claim 8, wherein said bonding layer has a thickness of about 30 to 100 μm .

12. (original) The ceramic cooktop of claim 8, wherein said bonding layer has a thickness of about 40 to 70 μm .

13. (original) The ceramic cooktop of claim 8, further comprising an electrically conductive intermediate layer applied between said bonding layer and said insulating layer.

14. (original) The ceramic cooktop of claim 13, wherein said electrically conductive intermediate layer is configured as an oxide layer that is rendered electrically conductive by oxygen loss during thermal spraying.

15. (original) The ceramic cooktop of claim 13, wherein said intermediate layer consists of a cermet material having a metal matrix comprising at least one component selected from the group formed by nickel, cobalt and chromium.

16. (cancelled)

17. (currently amended) A ceramic cooktop comprising:
a cooking plate made of a material selected from the group formed by a glass ceramic and a glass;
an electric heat conductor layer;
~~a thermally sprayed~~ an insulating layer having a thermally sprayed structure
arranged between said cooking plate and said heat conductor layer; and
an annular groove provided on a surface of said cooking plate facing said layers,
said annular groove surrounding a rim area of said insulating layer.